(19) JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: **11274572 A**

(43) Date of publication of application: **08.10.99**

(51) Int. Cl **H01L 33/00**
**G09F 9/33**

(21) Application number: **10073769**

(22) Date of filing: **23.03.98**

(71) Applicant: **NEC CORP**

(72) Inventor: **KIMURA TOSHIHIKO**

# (54) LED DISPLAY ELEMENT AND DISPLAY APPARATUS

(57) Abstract:

PROBLEM TO BE SOLVED: To enable the surface emission by using an LED chip to be a point light source, and increase the aperture ratio of the emission plane by placing the LED chip to be a light emitting element in a recessed case having an opening structure and applying a phosphor on the inner wall of the recessed case having the opening structure.

SOLUTION: An LED chip 1 to be a point light source is disposed in a recessed square case opened at the top, a phosphor 2 is coated on the inner wall of the recessed case 3, the LED chip 1 is disposed at the bottom of the recessed case 3, and the phosphor 2 is applied on the entire inner wall of the recessed case 3. The LED display element emits a light in a direction 6 perpendicular to the surface of a board 5 holding the case 3.

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